

WORK ORDER 2010-31

Date opened: 6 September 2010

Project: Quick Release Cargo Basket Assembly (Prototype)
Type: Robinson R44 SeriesBatch Quantity: 1 Complete RH Basket Assembly (90610-01-01)
1 Complete LH Basket Assembly (90610-01-02)
2 Sets Mounting Beams and Attachment FittingsApproval: SH00-48 SH10-48
Drawing List: ~~DCL 608-1, DCL 704~~ DCL 906-11 / DCL 906-12

Fabrication and Assembly Drawing(s)	Description
90610, Rev. 0	Basket Ass'y
90611, Rev. 0	Basket Body Ass'y
90612, Rev. 0	Basket Lid Ass'y
84255, Rev. 0	Handle Installation
84261, Rev. 0	Handle Bar Ass'y
84262, Rev. 0	Handle Bracket Ass'y
90630, Rev. 0	Forward Beam Ass'y
90631, Rev. 0	Aft Beam Ass'y
90620, Rev. 0	Attachment Fittings

Complete material tracking information on attached pages.

Work Order pre-completion Inspection:

Project is on Approval Limitation Record:	Y ✓
Document Control List revision level matches (or exceeds) STC:	Y ✓
Drawings revision levels match Document Control List:	Y ✓
Purchase order or Work order source is recorded for each part/ass'y:	Y ✓
Tests and inspections specifically called out on drawings are complete:	Y ✓
Release tags associated with all fabricated parts are attached:	Y ✓
All mounting hardware and supplies are included:	Y ✓

List all non-conformities raised: _____

Welder Signature: _____

Date: _____

Inspector Signature: 19 Nov 10
Date: _____

Drawing: 90610 Revision 0
 Assembly: 90610-01 Cargo Basket Ass'y (Quick-Release)

Qty Per	Part #	Description	Material	P.O.W.O.	Checked
1 Total	90610-01-01	RH Cargo Basket Assembly			
1 Total	90610-01-02	LH Cargo Basket Assembly			
1	90611-01	Basket Body Assembly	Below		
1	90612-01	Basket Lid Assembly	Below		
1	84255-01	Handle Bar Installation	Below		
1	36280-01	Brace Assembly	9-2081 Brace	8093	
1	MS20001P4	Piano Hinge		8104	
1	90627-01	Placard	0.063" Sheet, 6061-T6 Aluminum	10051	
3	49205-14	Bumper	Argus Industries Bumper	10026	
A/R	HR3213-5-02	Blind Rivet		10089	
48	HR3523-5-02	Monel Blind Rivet		10064	
3	40088-14	Fitting	Ancra	10006	
3	AN960-616	Washer		10077/10025	
1	90628-01	Fitting		10105	
1	AN3-15A	Bolt		7077	
1	AN3-17A	Bolt		7077	
4	AN960-10	Washer		10049	
2	AN970-3	Washer		8067	
2	MS21044N3	Nut		10025	

Processes	Per	Mat'ls Used	Inspection	Signature
Riveting	AC43.13-1B	HR3213-5-02, HR3523-5-02 Rivets		gc.
Final Inspection	Drawing 90610			gc.

Tag incomplete parts with Work Order # when stored between processes.

Tag complete parts / assemblies with Release Tag prior to storage.

Drawing: 90611 Revision 0
 Assembly: 90611-01 Basket Body Ass'y (Quick-Release)

Qty Per	Part #	Description	Material	P.O.W.O.	Checked
1 Total	90611-01-01	RH Basket Body Assembly			
1 Total	90611-01-02	LH Basket Body Assembly			
1	90621-01-01	RH Aft Attachment Hoop			
1	90621-01-02	LH Aft Attachment Hoop			
2	90621-04	Lug	1018 Mild Steel, 5/8" Rod	10087	
1	90622-01-01	RH Forward Attachment Hoop	4130 Steel, 1/2" x 0.035 Sqr. Tube		
1	90622-01-02	LH Forward Attachment Hoop	4130 Steel, 1/2" x 0.035 Sqr. Tube		
2	69823-02	Lug	1018 Mild Steel, 5/8" Rod		
3	49210-02	Hoop	4130 Steel, 1/2" x 0.035 Sqr. Tube		
A/R	--	Tube	4130 Steel, 1/2" x 0.035 Sqr. Tube		
A/R	--	Tube	4130 Steel, 3/4" x 0.035 Sqr. Tube		
1	84262-01	Handle Bracket Assembly	Below		
1	49215-01	Spacer	1018 Steel, 1/2" Rod	7007	
A/R	3/4-16F	Mesh	Expanded carbon steel	8094	

Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER70S-2		
Powder Coat	Drawing 90611			
Final Inspection	Drawing 90611			gc. gc.

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Drawing: 90612 Revision 0
Assembly: 90612-01 Basket Lid Ass'y (Quick-Release)

Qty Per	Part #	Description	Material	P.O.W.O.	Checked
1 Total	90612-01-01	RH Basket Lid Assembly			
1 Total	90612-01-02	RH Basket Lid Assembly			
A/R	69824-01	Tube	4130 Steel, 3/4" x 0.035 Sqr. Tube	10087	
1	49216-01	Spacer	1018 Steel, 1/2" Rod	7007	
1	84262-01	Upper Handle Bracket Assembly	Below		
1	36204-10	Placard Bracket	1018 Steel, 0.035" Sheet	9010	
A/R	3/4-16F	Mesh	Expanded carbon steel	8094	

Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER70S-2		
Powder Coat	Drawing 90612			je
Final Inspection	Drawing 90612			jc.

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Drawing: 84255 Revision 0
 Assembly: 84255-01 Handle Installation

Qty Per	Part #	Description	Material	P.O.W.O.	Checked
2 Total	84255-01	Handle Installation			
1	84261-01	Handle Bar Assembly	Below		
2	84267-01	Bracket	Delrin, 3/4" Sheet	WO2010-27	
2	36278-01	Spring (1 left, 1 right)	304 Stainless, 1/16" Dia Music Wire	9081	
2	36275-01	Bushing	SAE 660 Bronze, 5/16" Dia	6068	
2	AN3-14A	Bolt		8078	
4	AN3-11A	Bolt		10082	
12	AN960-10	Washer		10082	
6	MS21044N3	Nut		10049	

Processes	Per	Mat'ls Used	Inspection	Signature
Final Inspection	Drawing 84255			jc.

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Drawing: 84261 Revision 0
Assembly: 84261-01 Handle Bar Assembly

Qty Per	Part #	Description	Material	P.O.W.O.	Checked
2 Total	36261-01	Handle Bar Assembly			
1	36277-01	Handle Bar	316 Stainless, 1.0 x 0.035 Rnd. Tube	10083	
2	84265-01	Lever	304 Stainless, 0.105 Sheet	10036	
2	36274-01	Bushing	304 Stainless, 7/16" x 0.065 Rnd. Tube	8076	
2	MS20615-4M3	Monel Rivet		7039	

Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER308L		
Final Inspection	Drawing 84261			JC.

Tag incomplete parts with Work Order # when stored between processes.

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Drawing: 84262 Revision 0
Assembly: 84262-01 Handle Bracket Assembly

Qty Per	Part #	Description	Material	P.O.W.O.	Checked
2 Total	84261-01	Handle Bracket Assembly			
4	84272-01	Bushing	4130 Steel, 5/16" x 0.058 Tube	6076	
4	36273-01	Lid Bracket	321 Stainless, 0.050 Sheet	10037	
2	36275-02	Support	304 Stainless, 5/16" Rod	8065	

Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER308L		
Final Inspection	Drawing 84262			gc.

Tag incomplete parts with Work Order # when stored between processes.

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Drawing: 90630 Revision 0
 Assembly: 90630-01 Forward Beam Ass'y (Quick-Release)

Qty Per	Part #	Description	Material	P.O.W.O.	Checked
1 Total	90630-01-01	RH Forward Beam Assembly			
1 Total	90630-01-02	LH Forward Beam Assembly			
1	90630-02	Tube	304 Stainless, 1x2x0.065 tube	10086	
1	90630-03-01	RH Down Tube	304 1/2" Steel 304 Stainless, 1x1x0.065 tube	10096	
1	90630-03-02	LH Down Tube	304 1/2" Steel 304 Stainless, 1x1x0.065 tube	10096	
1	90630-04	Support	304 Stainless, 3/4" x 0.065 tube	10083	
2	90630-05	Ring	304 Stainless, 7/8" x 0.065 tube	10114	
1	90630-06	Bushing	304 Stainless, 5/8" x 0.120 tube	9011	
1	90630-07	Cap	321 Stainless, 0.032" Sheet	3021	
1	90630-08	Cap	321 Stainless, 0.032" Sheet	3021	
1	90630-09	Cap	321 Stainless, 0.032" Sheet	3021	
2	90630-11-01	RH Hook	304 Stainless, 2x1x0.12 tube	8098	
2	90630-11-02	LH Hook	304 Stainless, 2x1x0.12 tube	8098	
1	90630-12	Hose	Commercial 3/4" Heater Hose	commercial	
1	90630-13	Gusset	304 Stainless, 1x2x0.065 tube	10096	
1	69830-16	Strap	304 Stainless, 0.105" Sheet	10036	

Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER308L		
Powder Coat	Drawing 90630			
Final Inspection	Drawing 90630			QC QC.

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Drawing: 90631 Revision 0
 Assembly: 90631-01 Aft Beam Ass'y (Quick-Release)

Qty Per	Part #	Description	Material	P.O.W.O.	Checked
2 Total	90631-01-00	Aft Beam Assembly			
1	90631-02	Tube	304 Stainless, 1x2x0.0.065 tube	10096	
1	90631-03	Down Tube	304 Stainless, 1x2x0.0.065 tube	10096	
1	90630-04	Support	304 Stainless, 3/4" x 0.065 tube	10083	
2	90630-05	Ring	304 Stainless, 7/8" x 0.065 tube	10114	
1	90630-06	Bushing	304 Stainless, 5/8" x 0.120 tube	9011	
1	90630-07	Cap	321 Stainless, 0.032" Sheet	3021	
1	90630-08	Cap	321 Stainless, 0.032" Sheet	3021	
1	90630-09	Cap	321 Stainless, 0.032" Sheet	3021	
2	90631-10	Pad	304 Stainless, 1x0.125 Bar	10037	
1	90630-12	Hose	Commercial 3/4" Heater Hose	Commercial	
1	69830-16	Strap	304 Stainless, 0.105" Sheet	10036	
1	69830-17	Block	304 Stainless, 1/4" Sqr. Rod	9011	
1	69830-11	Guide	304 Stainless, 3/4" x 0.065" Rnd. Tube	10083	
1	69830-21	Stop	6061-T6 Aluminum, 5/8" Rod	10086	
1	69830-22	Knob	6061-T6 Aluminum, 3/4" Rod	10086	
1	69830-23	Spring	15mm x 70 mm Spring	9091	
1	#10-32	Screw	Stainless Steel, Commercial	9053	
1	MS21044C3	Nut		9056	


Processes	Per	Mat'ls Used	Inspection	Signature
Welding	AMS 2685C	Welding Rod ER308L		
Powder Coat	Drawing 90631			
Final Inspection	Drawing 90631			

Tag incomplete parts with Work Order # when stored between processes.

Tag complete parts / assemblies with Release Tag prior to storage.


Drawing: 90620 Revision 3
 Assembly: 90620-01, -02 Clamp Ass'y


Qty Per	Part #	Description	Material	P.O./W.O.	Checked
4 Total	90620-01-00	Clamp Assembly (Close)			
1	90620-03	Clamp (Close)	6061-T6 Aluminum, 4 x 1 bar	10032	
2 Total	90620-02-01	Clamp Assembly (Far, RH)			
1	90620-04-01	Clamp (Close)	6061-T6 Aluminum, 4 x 1 bar	10032	
2 Total	90620-02-02	Clamp Assembly (Far, LH)			
1	90620-04-02	Clamp (Close)	6061-T6 Aluminum, 4 x 1 bar	10032	
Parts Common to all Assemblies					
1	90620-05	Strap	6061-T6 Aluminum, 4 x 1 bar	10032	
1	AN4-12A	Bolt		10049	
1	AN960-416	Washer		10049	
1	MS21042L4	Nut		8107	
1	FT4F-175H	T Bolt		10066	
1	BH000142A4	Self Aligning Nut		10065	


Processes	Per	Mat'ls Used	Inspection	Signature
Final Inspection	Drawing 90620			

Tag incomplete parts with Work Order # when stored between processes.


Tag complete parts / assemblies with Release Tag prior to storage.


1. Approving Civil Aviation Authority/Country Transport Canada		2. AUTHORIZED RELEASE CERTIFICATE FORM ONE			3. Form Tracking No.
4. Organization Name and Address AERO Design Ltd. – 2013 39th Avenue NE, Calgary, Alberta, T2E 6R7					5. Work Order/Contract/Invoice WO2010-31
6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
	RH Cargo Basket	90610-01-01	1	90601-01	New
12. Remarks					
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data and are in condition for safe operation. <input type="checkbox"/> Non approved design data specified in block 12.			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulation specified in block 12 Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the Canadian Aviation Regulations .		
13b. Signature 		13c. Approved Organization Number AMF 73-04		14b. Signature	
13d. Name Jeff Clarke		13e. Date (dd/mmm/yyyy) 22 Oct 2010		14c. Approved Organization Number	
				14d. Name	
				14e. Date (dd/mmm/yyyy)	
Installer Responsibilities					
This certificate does not constitute authority to install. Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified. Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.					


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6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1. 2.	RH Forward Beam Aft Beam	90630-01-01 90631-01-00	1 1	N/A	New
12. Remarks					
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data and are in condition for safe operation. <input type="checkbox"/> Non approved design data specified in block 12.			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulation specified in block 12 Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the Canadian Aviation Regulations .		
13b. Signature 		13c. Approved Organization Number AMF 73-04		14b. Signature	
13d. Name Jeff Clarke		13e. Date (dd/mmm/yyyy) 22 Oct 2010		14c. Approved Organization Number	
				14d. Name	
				14e. Date (dd/mmm/yyyy)	
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6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	Clamp Ass'y (close)	90620-01-00	2	N/A	New
2.	Clamp Ass'y (RH, Far)	90620-02-01	2		
12. Remarks					
13a. Certifies that the items identified above were manufactured in conformity to: <input checked="" type="checkbox"/> Approved design data and are in condition for safe operation. <input type="checkbox"/> Non approved design data specified in block 12.			 14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulation specified in block 12 Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the Canadian Aviation Regulations. 		
13b. Signature 		13c. Approved Organization Number AMF 73-04		14b. Signature	
13d. Name Jeff Clarke		13e. Date (dd/mmm/yyyy) 22 Oct 2010		14c. Approved Organization Number	
14d. Name		14e. Date (dd/mmm/yyyy)		14f. Signature	
Installer Responsibilities This certificate does not constitute authority to install. Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified. Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.					

CAPITAL

1. Approving Civil Aviation Authority/Country Transport Canada		2. AUTHORIZED RELEASE CERTIFICATE FORM ONE			3. Form Tracking No.	
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6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work	
	LH Cargo Basket	90610-01-02	1	90602-01	New	
12. Remarks						
13a. Certifies that the items identified above were manufactured in conformity to:			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulation specified in block 12			
<input checked="" type="checkbox"/> Approved design data and are in condition for safe operation. <input type="checkbox"/> Non approved design data specified in block 12.			Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the Canadian Aviation Regulations.			
13b. Signature 		13c. Approved Organization Number AMF 73-04		14b. Signature		14c. Approved Organization Number
13d. Name Jeff Clarke		13e. Date (dd/mmm/yyyy) 22 Oct 2010		14d. Name		14e. Date (dd/mmm/yyyy)
<p align="center">Installer Responsibilities</p> <p>This certificate does not constitute authority to install.</p> <p>Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.</p> <p>Statements in blocks 13a or 14a do not constitute installation certification. In all cases, the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown.</p>						

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6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work	
1. 2.	LH Forward Beam Aft Beam	90630-01-02 90631-01-00	1 1	N/A	New	
12. Remarks						
13a. Certifies that the items identified above were manufactured in conformity to:			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulation specified in block 12			
<input checked="" type="checkbox"/> Approved design data and are in condition for safe operation. <input type="checkbox"/> Non approved design data specified in block 12.			Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the Canadian Aviation Regulations.			
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6. Item	7. Description	8. Part Number	9. Qty.	10. Serial/Batch No.	11. Status/Work
1.	Clamp Ass'y (close)	90620-01-00	2	N/A	New
2.	Clamp Ass'y (LH, Far)	90620-02-02	2		
12. Remarks					
13a. Certifies that the items identified above were manufactured in conformity to:			14a. <input type="checkbox"/> CAR 571.10 Maintenance Release <input type="checkbox"/> Other regulation specified in block 12		
<input checked="" type="checkbox"/> Approved design data and are in condition for safe operation. <input type="checkbox"/> Non approved design data specified in block 12.			Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, has been performed in compliance with the Canadian Aviation Regulations.		
13b. Signature 		13c. Approved Organization Number AMF 73-04		14b. Signature	
13d. Name Jeff Clarke		13e. Date (dd/mmm/yyyy) 22 Oct 2010		14c. Approved Organization Number	
				14d. Name	
				14e. Date (dd/mmm/yyyy)	
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SAP/AN